



UNIVERSITI TEKNOLOGI MARA

BCT493: CONSTRUCTION SAFETY AND HEALTH

Course Name (English)	CONSTRUCTION SAFETY AND HEALTH APPROVED
Course Code	BCT493
MQF Credit	3
Course Description	The course develops an awareness of the paramount importance of safety and health in construction. It covers the understanding of development of construction safety and health policy, plans and procedures. The course includes identifying the hazards and understanding the risk assessment and control.
Transferable Skills	Site Safety Supervisor Safety Officer Safety Auditor
Teaching Methodologies	Lectures, Case Study, Tutorial, Discussion, Presentation
CLO	CLO1 Describe the fundamental of legislation and best practices of Occupational safety and health in construction industry. CLO2 Demonstrate value and attitude by applying the legislation and best practices of occupational safety and health in construction industry. CLO3 Display teamwork skills by by delivering the legislation and best practices of occupational safety and health in construction industry.
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Safety and Health 1.1) Brief history on safety and health 1.2) The importance of safety and health management in construction. 1.3) Occupational Safety and Health Governing Bodies	
2. Legal Requirements 2.1) Occupational Safety and Health Act 1994 and its Regulations 2.2) General duties of employers, employees, self employed, designers, manufacturers, importers and suppliers of plant and substances. 2.3) Safety and health committee, notification of accidents, enforcement and liability. 2.4) Factories and Machinery Act 1967 and its regulation. 2.5) Site registration 2.6) Installation of machinery, certificate of fitness and duties of occupiers	
3. Safety and Health Management System 3.1) Safety and Health Management System components 3.2) Policy formulation 3.3) Accident prevention strategic 3.4) Competence and training needs 3.5) Occupational Safety and Health Information and Documentations 3.6) Communication 3.7) Planning and implementation of safety and health management system 3.8) Evaluation; performance monitoring 3.9) Preventive and Corrective Actions 3.10) Basic Emergency Response Management	
4. Safety and Health Hazard in Construction Site 4.1) Activities and hazards on site 4.2) Accident Theories 4.3) Types and causes of Accidents 4.4) Posture, fatigue and body damage	

5. Pre-Construction Safety and Health Planning

- 5.1) Introduction
- 5.2) Safety plan
- 5.3) Site Planning / Implementation
- 5.4) OSH Budgetting
- 5.5) Statutory Notification
- 5.6) Temporary Traffic Management
- 5.7) PPE Management and Safety Signage's

6. Monitoring Workplace OSH

- 6.1) Site Management: Site Safety, Health, Welfare Provisions and Housekeeping
- 6.2) Excavation
- 6.3) Working at Height
- 6.4) Material Handling
- 6.5) Confined Spaces
- 6.6) Hand & Power Tools
- 6.7) Electrical Safety
- 6.8) Fire Safety Management Program
- 6.9) Welding safety
- 6.10) Hazardous Materials Handling, Storage, Use and Disposal
- 6.11) Housekeeping

7. Workplace OSH Inspections

- 7.1) Introduction
- 7.2) Objectives of Workplace Inspection
- 7.3) Types of Workplace Inspection
- 7.4) Steps of Workplace Inspection
- 7.5) Sample of Inspection Checklist Guidance
- 7.6) Sample of Workplace Inspection Report

8. Accident Notification and Investigation

- 8.1) Introduction
- 8.2) Statutory Notification
- 8.3) In-House Reporting
- 8.4) Accident Investigation and Audit
- 8.5) Preparation accident investigation reports

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Each student required to prepare a final report of accident cases given for submission	10%	CLO2
	Assignment	Group case study report on Occupational Safety and Health implementation in construction project	20%	CLO3
	Discussion	Each student required to discuss the accident cases given regarding the direct causes, indirect causes and contributinal causes to present into their final report	10%	CLO2
	Presentation	Group presentation of findings on Occupational Safety and Health implementation in construction project.	10%	CLO3

Reading List	Recommended Text	
	Reference Book Resources	<ul style="list-style-type: none"> • Dester, W., D., B. 1995, <i>Safety Behaviour and Culture in Construction</i>, Pearson Education Ltd. • Cox, S., & Cox, T. 1996, <i>Safety System and People</i>, Butterworth • Cooper, D. 1998, <i>Improving Safety Culture</i>, John Wiley & Sons • Builders, M 2001, <i>Manual on Occupational Safety and Health</i>, Master Association of Malaysia Malaysia • Lee, F., C. 2001, <i>Effective of Safety Management System- The Malaysian Perspection</i>, Master Builders Journal Malaysia • Griffith, A., & Howarth 2001, <i>Construction Health and Safety Management</i>, Pearson Education Ltd. • Goetsch, D. 2004, <i>Occupational Safety and Health (For Technologists, Engineers and Managers)</i>, Prentice Hall Publication • Jamal Khan, M., K., Yusof, A., Z., & Abdullah Chew, N., A. 2005, <i>Keselamatan dan Kesihatan Pekerjaan Dalam Organisasi</i>, Prentice Hall/Pearson • Mohd Shariff, S. 2007, <i>Occupational Safety and Health Management</i>, 2nd Edition Ed., University Publication Centre (UPENA) Malaysia • Legal Research Board 2003, <i>Occupational Safety and Health Act 1994</i>, International Law Book Service Malaysia • Legal Research Board 2003, <i>Factories and Machinery Act 1997</i>, International Law Book Service Malaysia
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	